

Michael J. Yox Regulatory Affairs Director Vogtle 3 & 4

7825 River Road Waynesboro, GA 30830 706-848-6459 tel

APR 1 n 2021

Docket No.: 52-025

ND-21-0122 10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission **Document Control Desk** Washington, DC 20555-0001

> Southern Nuclear Operating Company Vogtle Electric Generating Plant Unit 3 ITAAC Closure Notification on Completion of ITAAC 2.7.01.02a [Index Number 678]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.7.01.02a [Index Number 678]. This ITAAC verifies the following for the Nuclear Island Nonradioactive Ventilation System: (1) American Society of Mechanical Engineers (ASME) Code Section III design reports exist for the as-built components and piping identified in the Combined License (COL) Appendix C, Tables 2.7.1-1 and 2.7.1-2 as ASME Code Section III. (2) A report exists and concludes that the ASME Code Section III requirements are met for nondestructive examination of pressure boundary welds. and (3) a report exists and concludes that the results of the pressure test of the components and piping identified in Tables 2.7.1-1 and 2.7.1-2 as ASME Code Section III conform with the requirements of the ASME Code Section III. The closure process for this ITAAC is based on the guidance described in Nuclear Energy Institute (NEI) 08-01, Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52, which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli Roberts at 706-848-6991.

Respectfully submitted.

Michael J. Yox

Regulatory Affairs Director Vogtle 3 & 4

Enclosure:

Vogtle Electric Generating Plant (VEGP) Unit 3

Completion of ITAAC 2.7.01.02a [Index Number 678]

MJY/JRV/sfr

U.S. Nuclear Regulatory Commission

ND-21-0122

Page 2 of 3

To:

Southern Nuclear Operating Company / Georgia Power Company

Mr. Peter P. Sena III (w/o enclosures)

Mr. D. L. McKinney (w/o enclosures)

Mr. M. D. Meier (w/o enclosures)

Mr. G. Chick

Mr. S. Stimac

Mr. P. Martino

Mr. M. J. Yox

Mr. A. S. Parton

Ms. K. A. Roberts

Mr. C. T. Defnall

Mr. C. E. Morrow

Mr. R. L. Beilke

Mr. S. Leighty

Ms. A. C. Chamberlain

Mr. J. C. Haswell

Document Services RTYPE: VND.LI.L06

File AR.01.02.06

cc:

Nuclear Regulatory Commission

Ms. M. Bailey (w/o enclosures)

Mr. M. King

Ms. A. Veil

Mr. C. P. Patel

Mr. G. J. Khouri

Mr. C. J. Even

Mr. B. J. Kemker

Ms. N. C. Coovert

Mr. C. Welch

Mr. J. Gaslevic

Mr. O. Lopez-Santiago

Mr. G. Armstrong

Mr. M. Webb

Mr. T. Fredette

Mr. C. Santos

Mr. B. Davis

Mr. J. Vasquez

Mr. J. Eargle

Mr. E. Davidson

Mr. T. Fanelli

Mr. S. Rose

Ms. K. McCurry

Oglethorpe Power Corporation

Mr. R. B. Brinkman

Mr. E. Rasmussen

U.S. Nuclear Regulatory Commission ND-21-0122 Page 3 of 3

Municipal Electric Authority of Georgia

Mr. J. E. Fuller Mr. S. M. Jackson

Dalton Utilities

Mr. T. Bundros

Westinghouse Electric Company, LLC

Dr. L. Oriani (w/o enclosures)

Mr. D. C. Durham (w/o enclosures)

Mr. M. M. Corletti

Mr. Z. S. Harper

Mr. J. L. Coward

Other

Mr. S. W. Kline, Bechtel Power Corporation

Ms. L. Matis, Tetra Tech NUS, Inc.

Dr. W. R. Jacobs, Jr., Ph.D., GDS Associates, Inc.

Mr. S. Roetger, Georgia Public Service Commission

Mr. R. L. Trokey, Georgia Public Service Commission

Mr. K. C. Greene, Troutman Sanders

Mr. S. Blanton, Balch Bingham

U.S. Nuclear Regulatory Commission ND-21-0122 Enclosure Page 1 of 8

Southern Nuclear Operating Company ND-21-0122 Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3 Completion of ITAAC 2.7.01.02a [Index Number 678] U.S. Nuclear Regulatory Commission ND-21-0122 Enclosure Page 2 of 8

ITAAC Statement

Design Commitment:

- 2.a) The components identified in Table 2.7.1-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.
- 2.b) The piping identified in Table 2.7.1-2 as ASME Code Section III is designed and constructed in accordance with ASME Code Section III requirements.
- 3.a) Pressure boundary welds in components identified in Table 2.7.1-1 as ASME Code Section III meet ASME Code Section III requirements.
- 3.b) Pressure boundary welds in piping identified in Table 2.7.1-2 as ASME Code Section III meet ASME Code Section III requirements.
- 4.a) The components identified in Table 2.7.1-1 as ASME Code Section III retain their pressure boundary integrity at their design pressure.
- 4.b) The piping identified in Table 2.7.1-2 as ASME Code Section III retains its pressure boundary integrity at its design pressure.

Inspections, Tests, Analyses:

Inspection will be conducted of the as-built components and piping as documented in the ASME design reports.

Inspection of the as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.

A pressure test will be performed on the components and piping required by the ASME Code Section III to be pressure tested.

Acceptance Criteria:

The ASME Code Section III design reports exist for the as-built components and piping identified in Tables 2.7.1-1 and 2.7.1-2 as ASME Code Section III.

A report exists and concludes that the ASME Code Section III requirements are met for nondestructive examination of pressure boundary welds.

A report exists and concludes that the results of the pressure test of the components and piping identified in Tables 2.7.1-1 and 2.7.1-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

ITAAC Determination Basis

This ITAAC requires inspections, tests, and analyses be performed and documented to ensure the Nuclear Island Nonradioactive Ventilation System (VBS) components and piping listed in the Combined License (COL) Appendix C, Table 2.7.1-1 (Attachment A) and Table 2.7.1-2

U.S. Nuclear Regulatory Commission ND-21-0122 Enclosure Page 3 of 8

(Attachment B) that are identified as American Society of Mechanical Engineers (ASME) Code Section III, were designed and constructed in accordance with applicable requirements.

<u>2.a and 2.b) The ASME Code Section III design reports exist for the as-built components and piping identified in Tables 2.7.1-1 and 2.7.1-2 as ASME Code Section III.</u>

Each component listed in Table 2.7.1-1 as ASME Code Section III was fabricated in accordance with the VEGP Updated Final Safety Analysis Report (UFSAR) and the ASME Code Section III requirements. The ASME Code Section III certified Design Reports for these components exist and document that the as-built components conform to the approved design details. The ASME Section III Design Report for each component is documented in the component's completed ASME Section III Code Data Report. The individual component ASME Section III Code Data Reports are documented on the ASME Section III N-5 Code Data Report for the applicable piping system (References 1, 2, 3 & 4).

The as-built piping listed in Table 2.7.1-2 including the components listed in Table 2.7.1-1 as ASME Code Section III, were subjected to a reconciliation process (Reference 5), which verified that the as-built piping was analyzed for applicable loads (e.g. stress reports) and for compliance with all design specification and Code provisions. Design reconciliation of the as-built systems, including installed components, validated that construction completion, including field changes and any nonconforming condition dispositions, were consistent with and bounded by the approved design. All applicable fabrication, installation and testing records, as well as, those for the related Quality Assurance (QA) verification/inspection activities, which confirmed adequate construction in compliance with the ASME Code Section III and design provisions, are referenced in the N-5 Data Report and/or its sub-tier references.

The applicable ASME Section III N-5 Code Data Reports, which include the location of the certified Design Reports for all the components listed in Table 2.7.1-1 (Attachment A) and piping listed in Table 2.7.1-2 (Attachment B) as ASME Code Section III, exist and conclude that these installed components were designed and constructed (including their installation within the applicable as-built piping system) in accordance with the ASME Code (1998 Edition, 2000 Addenda and 1989 Edition, 1989 Addenda), Section III requirements as applicable, as described in UFSAR Subsection 5.2.1 (Reference 6). The N-5 Code Data Reports for the piping systems containing the components listed in the Table 2.7.1-1 and Table 2.7.1-2 are identified in Attachments A and B, respectively.

3.a and 3.b) A report exists and concludes that the ASME Code Section III requirements are met for nondestructive examination of pressure boundary welds.

Inspections were performed in accordance with ASME Code Section III (1998 Edition, 2000 Addenda) to demonstrate that as-built pressure boundary welds in components identified in Table 2.7.1-1 as ASME Code Section III meet ASME Code Section III requirements (i.e., no unacceptable indications).

The applicable nondestructive examinations (including liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by ASME Code Section III) of the components' pressure boundary welds are documented in the Non-destructive Examination Report(s), which support completion of the respective ASME Section III N-5 Code Data Report certified by the Authorized Nuclear Inspector, as listed in Attachment A.

U.S. Nuclear Regulatory Commission ND-21-0122 Enclosure Page 4 of 8

Per ASME Code Section III, Subarticle NCA-8300, "Code Symbol Stamps," the N-5 Code Data Reports (References 1, 2, 3 & 4), document satisfactory completion of the required examination and testing of the item, which includes non-destructive examinations of pressure boundary welds. Satisfactory completion of the non-destructive examination of pressure boundary welds ensured that the pressure boundary welds in components identified in Table 2.7.1-1 as ASME Code Section III met ASME Code Section III requirements.

An inspection was performed in accordance with Reference 5 to demonstrate that the as-built pressure boundary welds in piping identified in Table 2.7.1-2 (Attachment B) as ASME Code Section III met ASME Code Section III requirements (i.e., no unacceptable indications). This portion of the ITAAC was completed when the piping identified in Table 2.7.1-2, which is encompassed within the respective piping system Code Symbol N-Stamp and the corresponding piping system N-5 Code Data Report (References 1, 2, 3 & 4), was completed. The non-destructive examinations (including visual inspection, liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by ASME Code Section III) of the piping pressure boundary welds were documented in the Non-destructive Examination Report(s) within the piping system's supporting data package, which support completion of the respective Code Stamping and N-5 Code Data Report.

The completion of stamping the respective piping system along with the corresponding ASME N-5 Code Data Reports (certified by the Authorized Nuclear Inspector) ensured that the piping was constructed in accordance with the design specifications and the ASME Code Section III and that the satisfactory completion of the non-destructive examinations of piping pressure boundary welds for the pipe lines identified in Table 2.7.1-2 met ASME Code Section III requirements and were documented in the Non-destructive Examination Report(s) within the supporting data packages.

4.a and 4.b) A report exists and concludes that the results of the pressure test of the components and piping identified in Tables 2.7.1-1 and 2.7.1-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

Pressure tests were performed by the vendor to demonstrate that the components identified in Table 2.7.1-1 (Attachment A) as ASME Code Section III retain their pressure boundary integrity at their design pressure. The completion of the N-5 Data Reports was governed by Reference 5.

This portion of the ITAAC was completed once each component identified in Table 2.7.1-1 had their individual Code Symbol N-Stamp and corresponding Code Data Report completed, and the components installed into the respective Code Symbol N-Stamped piping system and documented on the corresponding N-5 Code Data Report (References 1, 2, 3 & 4). The pressure testing results of the component's pressure boundary were documented in the Pressure (i.e., hydrostatic) Testing Report(s) within the supporting component's data package, which support completion of the respective Code Stamping and Code Data Report.

The completion of stamping the individual components and the respective piping system along with the corresponding ASME Code Data Reports (certified by the Authorized Nuclear Inspector) ensured that the components were constructed in accordance with the Design Specifications and the ASME Code Section III and that the satisfactory completion of the pressure testing of each component identified in Table 2.7.1-1 as ASME Code Section III were

U.S. Nuclear Regulatory Commission ND-21-0122 Enclosure Page 5 of 8

documented in the Pressure (i.e. hydrostatic) Testing Report(s) within the supporting data packages and met ASME Code Section III requirements.

This ITAAC also verified that the piping identified in Table 2.7.1-2 (Attachment B) fully meets all applicable ASME Code, Section III requirements and retains its pressure boundary integrity at its design pressure.

Pressure tests were performed (as applicable) that comply with the ASME Code (1998 Edition, 2000 Addenda), Section III requirements to demonstrate that the ASME Code Section III piping identified in Table 2.7.1-2 retains its pressure boundary integrity at its design pressure.

The pressure tests verified that there were no leaks at welds or piping, and that the pressure boundary integrity was retained at its design pressure. The pressure testing results of the pipe lines are documented in Pressure Testing Reports. The Pressure Testing Reports are documented in the ASME Section III N-5 Code Data Reports and support completion of the ASME Section III N-5 Code Data Reports for the applicable piping system (References 1, 2, 3 & 4).

The ASME Section III N-5 Code Data Reports (References 1, 2, 3 & 4) identified in Attachments A and B document that the results of the pressure testing of the components and piping identified in Table 2.7.1-1 and Table 2.7.1-2 respectively conform with the requirements of the Code (1998 Edition, 2000 Addenda), Section III.

References (1, 2, 3 & 4) and the supporting as-built design reports (References 7, 8, 9 & 10) provide the evidence that the ITAAC Acceptance Criteria requirements were met:

- The ASME Code Section III design reports exist for the as-built components and piping identified in Tables 2.7.1-1 and 2.7.1-2 as ASME Code Section III;
- A report exists and concludes that the ASME Code Section III requirements are met for nondestructive examination of pressure boundary welds; and
- A report exists and concludes that the results of the pressure test of the components and piping identified in Tables 2.7.1-1 and 2.7.1-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

This ITAAC required no Preservice Inspections (PSI) examinations for the VBS, Potable Water System (PWS), Sanitary Drainage System (SDS), and Waste Water System (WWS) per the Unit 3 Preservice Inspection Program Plan (Reference 11).

References 1 through 5, and 7 through 11, are available for NRC inspection as part of the Unit 3 ITAAC 2.7.01.02a Completion Package (Reference 12).

U.S. Nuclear Regulatory Commission ND-21-0122 Enclosure Page 6 of 8

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review, which included now consolidated ITAAC Indexes 679, 680, 681, 682 and 683, found no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.7.01.02a (Reference 12) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.7.01.02a was performed for VEGP Unit 3 and that the prescribed acceptance criteria were met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

- 1. SV3-VBS-MUR-001, Rev. 0, "AP1000 Vogtle Unit 3 ASME Section III System Code Data Report for the Nuclear Island Nonradioactive Ventilation System (VBS)"
- 2. SV3-PWS-MUR-001, Rev. 0, "AP1000 Vogtle Unit 3 ASME Section III System Code Data Report for the Potable Water System (PWS)"
- 3. SV3-SDS-MUR-001, Rev. 0, "AP1000 Vogtle Unit 3 ASME Section III System Code Data Report for the Sanitary Drainage System (SDS)"
- 4. SV3-WWS-MUR-001, Rev. 0, "AP1000 Vogtle Unit 3 ASME Section III System Code Data Report for the Waste Water System (WWS)"
- 5. APP-GW-GAP-139, Rev. 7, "Westinghouse/Stone & Webster ASME Code Data Report As-Built Documentation Interface Procedure"
- 6. VEGP 3&4 Updated Final Safety Analysis Report, Rev. 9.2, Subsection 5.2.1, Compliance with Codes and Code Cases
- 7. SV3-VBS-S3R-001, Rev. 1, "Vogtle Unit 3 Nuclear Island Nonradioactive Ventilation System (VBS) ASME III As-Built Piping System Design Report"
- 8. SV3-PWS-S3R-001, Rev. 0, "Vogtle Unit 3 Potable Water System (PWS) ASME III As-Built Piping System Design Report"
- 9. SV3-SDS-S3R-001, Rev. 3, "Vogtle Unit 3 Sanitary Drainage System (SDS) ASME III As-Built Piping System Design Report"
- 10. SV3-WWS-S3R-001, Rev. 0, "Vogtle Unit 3 Waste Water System (WWS) ASME III Piping System Design Report"
- 11. SV3-GW-GEI-100, Rev. 2, "AP1000 Preservice Inspection Program Plan for Vogtle Unit 3"
- 12. 2.7.01.02a-U3-CP-Rev0, ITAAC Completion Package

Attachment A

SYSTEM: Nuclear Island Nonradioactive Ventilation System (VBS)

			· -	
Equipment Name *	Tag No. *	ASME Code Section III*	ASME III As-Built Design Report	N-5 Report
MCR Supply Air Isolation Valve	VBS-PL-V186	Yes	SV3-VBS-S3R-001	SV3-VBS-MUR-001
MCR Supply Air Isolation Valve	VBS-PL-V187	Yes	SV3-VBS-S3R-001	SV3-VBS-MUR-001
MCR Return Air Isolation Valve	VBS-PL-V188	Yes	SV3-VBS-S3R-001	SV3-VBS-MUR-001
MCR Return Air Isolation Valve	VBS-PL-V189	Yes	SV3-VBS-S3R-001	SV3-VBS-MUR-001
MCR Exhaust Air Isolation Valve	VBS-PL-V190	Yes	SV3-VBS-S3R-001	SV3-VBS-MUR-001
MCR Exhaust Air Isolation Valve	VBS-PL-V191	Yes	SV3-VBS-S3R-001	SV3-VBS-MUR-001
PWS MCR Isolation Valve	PWS-PL-V418	Yes	SV3-PWS-S3R-001	SV3-PWS-MUR-001
PWS MCR Isolation Valve	PWS-PL-V420	Yes	SV3-PWS-S3R-001	SV3-PWS-MUR-001
PWS MCR Vacuum Relief	PWS-PL-V498	Yes	SV3-PWS-S3R-001	SV3-PWS-MUR-001
MCR SDS (Vent) Isolation Valve	SDS-PL-V001	Yes	SV3-SDS-S3R-001	SV3-SDS-MUR-001
MCR SDS (Vent) Isolation Valve	SDS-PL-V002	Yes	SV3-SDS-S3R-001	SV3-SDS-MUR-001
MCR WWS Isolation Valve	WWS-PL-V506	Yes	SV3-WWS-S3R-001	SV3-WWS-MUR-001

^{*}Excerpts from COL Appendix C Table 2.7.1-1

Attachment B

SYSTEM: Nuclear Island Nonradioactive Ventilation System (VBS)

Line Name*	Line Number*	ASME Code Section III*	ASME III As-Built Design Report	N-5 Report
Main Control Room Supply	VBS-L311	Yes	SV3-VBS-S3R-001	SV3-VBS-MUR-001
Main Control Room Exhaust	VBS-L312	Yes	SV3-VBS-S3R-001	SV3-VBS-MUR-001
Main Control Room Toilet Exhaust	VBS-L313	Yes	SV3-VBS-S3R-001	SV3-VBS-MUR-001
Main Control Room Sanitary Vent Line	SDS-PL-L016	Yes	SV3-SDS-S3R-001	SV3-SDS-MUR-001
Main Control Room Sanitary Drain Line	SDS-PL-L179	Yes	SV3-SDS-S3R-001	SV3-SDS-MUR-001
Main Control Room Sanitary Drain Line	SDS-PL-L182	Yes	SV3-SDS-S3R-001	SV3-SDS-MUR-001
Main Control Room Water Line	PWS-PL-L319 ⁺	Yes	SV3-PWS-S3R-001	SV3-PWS-MUR-001
Main Control Room Water Line	PWS-PL-L320 ⁺	Yes	SV3-PWS-S3R-001	SV3-PWS-MUR-001
Main Control Room Waste Water Line	WWS-PL-L808	Yes	SV3-WWS-S3R-001	SV3-WWS-MUR-001
Main Control Room Waste Water Line	WWS-PL-L851	Yes	SV3-WWS-S3R-001	SV3-WWS-MUR-001

^{*}Excerpts from COL Appendix C, Table 2.7.1-2

⁺ For girth fillet welds between piping and socket welded fittings, valves and flanges, refer to VEGP UFSAR Section 5.2.1.1 (Reference 6)